

Name: \_\_\_\_\_

Date: \_\_\_\_\_

### Check if Relation is a Function (12 pts classwork, version 23)

1. A **relation** is expressed as a list of  $(x, y)$  ordered pairs.

$(2, 2)$   $(1, 5)$   $(7, 9)$   $(1, 5)$   $(9, 5)$

- Is this list consistent with  $y$  being a function of  $x$ ? Why or why not?

yes

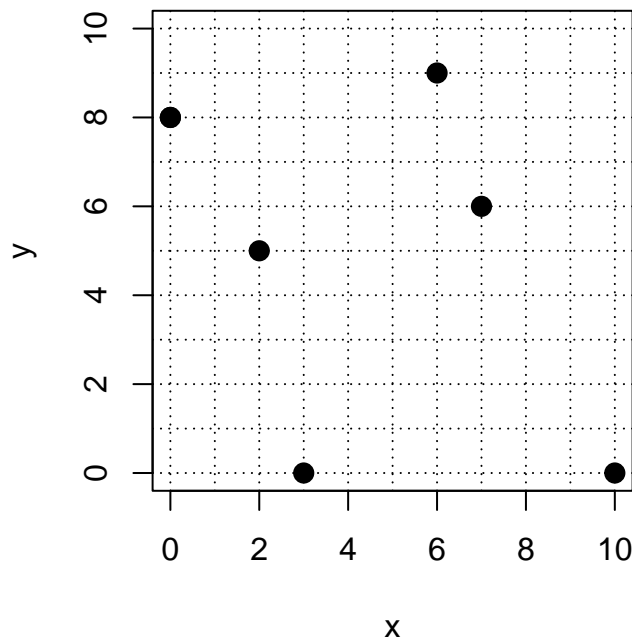
- Is this list consistent with  $x$  being a function of  $y$ ? Why or why not?

no

- Is this list consistent with a one-to-one function? Why or why not?

no

2. A relation is shown as points on a graph.



- Is this relation consistent with  $y$  being a function of  $x$ ? Why or why not?

yes

- Is this relation consistent with  $x$  being a function of  $y$ ? Why or why not?

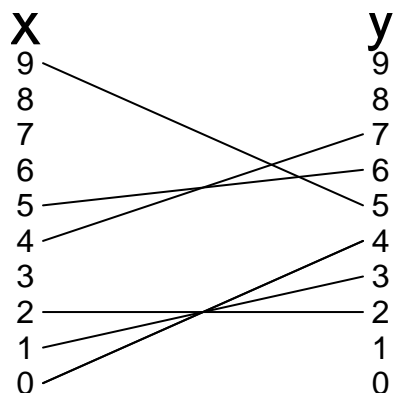
no

- Is this relation consistent with a one-to-one function? Why or why not?

no

### Check if Relation is a Function (version 23)

3. A relation is shown with segments connecting elements of two sets.



- Is this relation consistent with  $y$  being a function of  $x$ ? Why or why not?

yes

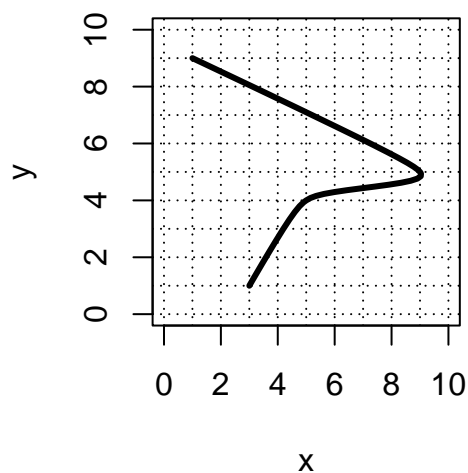
- Is this relation consistent with  $x$  being a function of  $y$ ? Why or why not?

yes

- Is this relation consistent with a one-to-one function? Why or why not?

yes

4. A relation is shown as a curve plotted on an  $x, y$



- Is this relation consistent with  $y$  being a function of  $x$ ? Why or why not?

no

- Is this relation consistent with  $x$  being a function of  $y$ ? Why or why not?

yes

- Is this relation consistent with a one-to-one function? Why or why not?

no